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Substitute	for form 1449A/PTO		_	Application Number	10/729,510
	SUPPLEMENT	በልፕ		Filing Date	December 5, 2003
IMEO	rmation disc			First Named Inventor	Vail, III
	Tement by ap			Group Art Unit	3672
9,,,,		· (30)	90000	Examiner Name	Unknown
•	(Use as many sheets as ne	cessary	)	Attorney Docket Number	WEAT/0527.P1
Sheet	4	of	11	Submission Date	July 22, 2004

Examiner Initials*	Cite No.	Document Number	Pu	blication Date		Name of Patentee or	Pages, Columns, Lines, Who	ere
	Não.	Number-Kind Code <sup>2 (3 trees)</sup>	MM-DD-YYYY		Applicant of Cited Document		Refevant Passages or Relevi Figures Appear	ant
1	A58	US-4448745	05/	08/1994	Sto	one, et al.		
77	A59	US-4398076	08/	02/1983	Ino	us		
	A60	US-4398077	09/	12/1881/983	Ra	dike		
	A61	US-4274778	08/	23/1981	Put	tnam, et al.		
	A62	US-4221269	09/	09/1980	Hu	dson		
	A63	US-4189185	02/	19/1980	Ka	mmerer, Jr., et al.		
	A64	US-4186628	02/	02/1860 1680	Bos	nnice		
	A65	US-4100981	07/	18/1978	Ch	affin .		
	A66	US-4083405	04/	11/1978	Shi	irley		
	A67	US-3934660	01/	27/1976	Nel	Ison		
	A68	US-3901331	08/	26/1975	Dju	rovic		
	A69	US-3785193	01/	15/1974	Kin	iley et al.		
	A70	US-3700048	10/	24/1972	De	smoulins		
	A71	US-3691624	09/	19/1972	Kin	iley		
	A72	US-3669190	06/	13/1972	Siz	er et al.		
	A73	US-3624760	11/	30/1971	Bos	dine		
	A74	US-3575245	04/	20/1971	Ö	rdary, et al.		
	A75	US-3489220	01/	13/1970	Kln	ley		
	A76	U\$3387893	06/	11/1968	Ho	ever		
		FC	RE	ign pater	TV	DOCUMENTS .		
xamher	Cite	Foreign Patent Document		Publication D	ata	Name of Patentee or	Pages, Columns, Lines,	۲
nitials	No.1	Country Code*-Humber*-Kind Code* (if time	<b>≔</b> n)	MM-DD-YYY		Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	
2	B14	GB 2 053 088		02/04/1981		Gebhart		
7	B15	GB 2 201 912		09/14/1988		Dinsdale		
7	B16	GB 2 313 860		02/10/1997		Lee		
	B17	GB 2 320 270		06/17/1998		Armell, et al.		
11	B18	GB 2 333 542		07/28/1999		Kirk		

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Under the Paperwort Reduction Act of 1893, no persons are required to a collection of information unless is display a valid OMB control number. 10/729,510 Application Number Substitute for form 1449A/PTO December 5, 2003 Filing Date SUPPLEMENTAL First Named Inventor Vail, III INFORMATION DISCLOSURE Group Art Unit 3672 STATEMENT BY APPLICANT Examiner Name Unknown (Use as many sheets as necessary) Attorney Docket Number WEAT/0527.P1

**Submission Date** 

			U.S. PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where	
	NO.	Number-Kind Code <sup>2 (1 brown)</sup>	MM-OD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	
4	A77	US-3353599	11/21/1987	Swift		
//	A78	US-3191680	06/29/1965	Vincent		
7	A79	US-3191677	06/29/1965	Kinley		
	A80	US-3169592	02/26/1985	Kammerer		
	A81	US-3102599	09/03/1963	Hillbum		
	A82	US-3087548	04/30/1983	Wooley		
	A83	US-2805043	09/03/1957	Williams		
ĺ	A84	US-2765148	10/02/1956	Williams		
	A85	US-2764329	09/25/1956	Hampton		
	A86	US-2743087	04/24/1956	Layne, et al.		
	A87	US-2663073	12/22/1953	Biebar et al.		
	A88	US-2641444	06/09/1953	Moon		
	A89	US-2627891	02/10/1953	Clarts		
	A90	US-2499630	03/07/1950	Clark		
	A91	US-2324679	07/20/1943	Сож		
	A92	US2295803	09/15/1800/942	O'Leary		
	A93	US-2216895	10/08/1940	Stotes		
	A94	US-2060352	11/11/1936	Stokes		

		Foreign patent documents								
	Examirer Cite		Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Cotumns, Lines,	T⁰			
Initials		No.'	Country Codo <sup>3</sup> -Numborf-Hind Codo <sup>3</sup> (Ji known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear				
	7	B19	GB 2 365 463	02/20/2002	Giancarlo					
	<u></u>	B20	GB 2 382 361	05/28/2003	Hewson, et al.					
		B21	GB 2 216 926	10/18/1989	Haloid					
71	B22 GB 2 348 223 09/27/2000 Cook, et al.									
<u> </u>			1000000	032772000	OOA, 61 al.	<u> </u>				

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**Date Considered** 

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## SUPPLEMENTAL **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

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	Application Number	10/729,510
	Filing Date	December 5, 2003
	First Named Inventor	Vail, III
	Group Art Unit	3672
	Examiner Name	Unknown
	Attorney Docket Number	WEAT/0527.P1
	Submission Date	July 22, 2004

	U.S. PATENT DOCUMENTS									
Examine	r Cite		Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where				
Initials*	7   🚾		Number-Kind Code <sup>2 () troop)</sup>	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear				
1	AS	55	US-2049450	08/04/1936	Johnson					
, /,	AS	88	US-2017451	10/15/1935	Wickersham					
	AS	7	US-1981525	11/20/1934	Price	·				
	AS	38	US-1880218	10/04/1932	Simmons					
	AS	9	US-1342424 .	06/08/1920	Cotten					
	A1	00	US-1301285	04/22/1919	Leonard					
	A1	01	US1185582	05/30/1916	Bignell					
	A1	02	US-2004/0069501	04/15/2004	Haugen et al.					
	A1	03	US-2003/0217865	11/27/2003	Simpson, et al.					
	A1	04	US-2003/0146023	08/07/2003	Pla					
	A1	05	US-2003/0141111	07/31/2004 2009	Pia					
	A1	06	US-2003/0111267	06/19/2003	Pia					
	A1	07	US-2003/0056991	03/27/2003	Hahn, et al.					
	A1	08	US-2002/0079102	06/27/2002	Dewey, et al.					
	A1	09	US-2002/0040787	4/11/2002	Cook, et al.					
	A1	10	US-2001/0002626	6/7/2001	Frank, et al.					
	A1	11	US-5833002	11/10/1998	Holcomba					
	A1	12	US-5815747	04/01/1997	Vail, III					
	A1	13	US-5375668	12/27/1994	Hallundback					
	A1	14	US-5197553	03/30/1993	Leturno					
	AI	15	US-4962822	01 <del>/16/1090</del> -	Pascale 10 1990					
	A1	18	US-4960173	10/02/1990	Cognevich, et al.					
	A1	17	US-4651837	03/24/1987	Mayfield					
	A1	18	US-3603411	09/07/1971	Link					
	A1	19	US-3552508	01/05/1971	Brown					

		FOREIGN PATENT DOCUMENTS								
	Examiner Cite		Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,	T°			
Initials*		No.'	Country Code <sup>8</sup> -Nurriber <sup>4</sup> -Kind Code <sup>8</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear				
A	7	B23	GB 540 027	10/02/1941		·				
		B24	GB 7 928 86	04/12/1958						
		B25	GB 8 388 33	08/22/1960						
$\Box 77$	B26 GB 9 977 21 07/07/1965 Gamler, et al.									

Examiner Date Considered

Sheet 3 of 18 sheet(s) U.S. Department of Commerce, Patent and Trademark Office Docket No. Serial No. 10/729.510 (PTO Form 1449 modified) WEAT/0527 LIST OF PATENTS AND PUBLICATIONS CITED BY APPLICANT Applicant Confirmation William Banning Vail, No.: Unknown (Use several sheets if necessary) Filing Date Group Examiner Unknown 12/05/2003 3672 U.S. Patent Documents °Examiner Document Issue Applicant(s) Class Filing Date If Subclass Initial-Number Date Name **Appropriate A53** 6,119,772 09-19-2000 Pruet 166 81.1 A54 6,089,323 07-18-2000 Newman et al. 166 381 A55 6.082.461 07-04-2000 Newman et al. 166 381 **A56** 6,065,550 05-23-2000 Gardes 175 62 **A57** 6,062,326 05-16-2000 Strong et al. 175 402 **A58** 6,061,000 05-09-2000 Edwards 340 854.6 A59 6,059,053 05-09-2000 McLeod 175 258 6,059,051 05-09-2000 Jewkes et al: 175 A60 76 A61 6,026,911 02-22-2000 175 24 Angle et al. A62 6.000.472 12-14-1999 Albright et al. 166 380 -**A63** 5,971,079 166 10-28-1999 Mullins 387 A64 5,957,225 09-28-1999 Sinor 175 57 **A65** 5,954,131 09-21-1999 Sallwasser 166 254.2 **A66** 5,950,742 09-14-1999 175 Caraway 57 A67 5,947,213 09-07-1999 Angle et al. 175 24 A68 5,931,231 08-03-1999 Mock 166 377 A69 5,921,332 07-13-1999 Spedale, Jr. 175 415 A70 5,921,285 07-13-1999 Quigley et al. 138 125 5,913,337 Williams et al. A71 06-22-1999 138 125 5,908,049 06-01-1999 Williams et al. 138 125 A72 A73 5,907,664 05-25-1999 Wang et al. 395 86 A74 5,894,897 04-20-1999 Vail, III 175 318 A75 5,899,549 04-06-1999 Sprehe 175 71 **A76** 5,890,537 04-06-1999 Lavaure et al. 166 285 A77 5,860,474 01-19-1999 Stoltz et al. 166 50 Makohl et al. A78 5,845,722 12-08-1998 175 101 Examiner **Date Considered** 

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

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ation Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet of 2

Complete If Known					
Application Number	10/729,510				
Filing Date	December 5, 2003				
First Named Inventor	William B. Vail, III				
Art Unit	3672				
Examiner Name	Thomas Bomar				
Attorney Docket Number	WEAT/0527.P1				

			U.S. PATENT	DOCUMENTS	
Exeminar Initials	Cite No.	Document Number  Number - Kind Code <sup>2</sup> (# Innovn)	Publication Date MM-DD-YYYY	Name of Potentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appac
	<b>}</b>	US-6,857,487	02-22-2005	Galloway	7 1100 75000
77	1	US- 6,857,486	02-22-2005	Chitwood, et al.	
<del>/</del> /		US- 6,854,533	02-15-2005	Galloway	
$\neg$	1	US- 6,848,517	02-01-2005	Wardley	
		US-6,840,322	01-11-2005	Haynes	
$\neg$	i	US-6,752,211	08-22-2004	Daway, et al.	
		US-6,745,834	06-08-2004	Davis, et al.	
		US-6,725,924	04-27-2004	Davidson, et al.	
1		US-6,708,769	03-23-2004	Haugen, et al.	
		US-6,668,684	12-30-2003	Allen, et al.	
		US-6,668,274	12-23-2003	Hughes	
		US-6,655,460	12-02-2003	Bailey, et al.	
		US-6,651,737	11-25-2003	Bouligny	
T		US-6,585,040	07-01-2003	Hanton, et al.	<del></del>
	1	US-6,538,522	03-25-2003	Birckhead, et al.	
		US-6,464,011	10-15-2002	Tubel	
		US-6,458,471	10-01-2002	Lovato, et al.	
		US-8-483-244 (244 324)	09-03-2002	Juhasz, et al.	
		US-6,378,633	04-30-2002	Moore	
		US- 6,371,203	04-16-2002	Frank, et al.	

		FOREIGN PA	ATENT DOCUM	aents		
F	0'-	Foreign Patent Document		Nerna of Patentea or	Pages, Columns, Lines,	
Examiner Cite Initials No.		Country Code <sup>8</sup> - Number <sup>4</sup> - Kind Code <sup>6</sup> (il Innovni)	Publication Date UM-OD-YYYY	Applicant of Citod Document	Where Retevant Passages or Retevant Figures Appear	T⁰
		EP 0479583	04-08-1992	Gonalez, et al.		
		EP 1148206	10-24-2001	Scott, et al.		
		GB 2381809	05-14-2003	Ohmer		
مأد	ì——	GB 2347445	09-06-2000	Metcalfe, et al.		
V		WO 99/24689	05-20-1999	Collins -		
~		WO 99/04135	01-28-1999	Collins		
7		WO 97/05360	02-13-1997	Collins		
71		WO 03/074836	09-12-2003	Philip		
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